Appl. No. 10/596,024 Amdt. Dated June 2, 2010 Reply to Office Action of April 1, 2010

## Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of the claims in the application.

## Listing of the Claims:

Claim 1 (cancelled) Claim 2 (cancelled) Claim 3 (cancelled) Claim 4 (cancelled) Claim 5 (cancelled) Claim 6 (cancelled) Claim 7 (cancelled) Claim 8 (cancelled) Claim 9 (cancelled) Claim 10 (cancelled) Claim 11 (cancelled) Claim 12 (cancelled) Claim 13 (cancelled) Claim 14 (cancelled) Claim 15 (cancelled) Claim 16 (cancelled) Claim 17 (cancelled) Claim 18 (cancelled) Claim 19 (cancelled) Claim 20 (cancelled) Appl. No. 10/596,024 Amdt. Dated June 2, 2010 Reply to Office Action of April 1, 2010

Claim 21 (cancelled)

Claim 22 (cancelled)

Claim 23 (cancelled)

Claim 24 (cancelled)

Claim 25 (previously presented) A nucleic acid molecule comprising a nucleotide sequence encoding a fatty acid elongase, the fatty acid elongase comprising the amino acid sequence as set forth in SEQ ID NO: 24.

Claim 26 (previously presented) The nucleic acid molecule according to claim 25 comprising the nucleotide sequence as set forth in SEQ ID NO: 25.

Claim 27 (currently amended) An expression vector comprising a <u>the</u> nucleic acid molecule as defined in claim 25 in reading frame alignment with a promoter capable of increasing expression of said nucleic acid molecule in a cell of a seed.

Claim 28 (previously presented) The expression vector according to claim 27, wherein the nucleic acid molecule comprises the nucleotide sequence as set forth in SEQ ID NO: 25.

Claims 29 (previously presented) A cell comprising a heterologous nucleic acid molecule, the heterologous nucleic acid molecule comprising a nucleotide sequence encoding a fatty acid elongase, the fatty acid elongase comprising the amino acid sequence as set forth in SEQ ID NO: 24.

Claim 30 (previously presented) The cell according to claim 29, wherein said cell is a fungal cell or a yeast cell.

Claim 31 (previously presented) The cell according to claim 29, wherein said cell is a plant cell.

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Claim 32 (previously presented) The cell according to claim 29, wherein said cell is a plant seed cell.

Claim 33 (previously presented) The cell according to claim 32, wherein the cell produces an increase in proportion of  $C_{20}$  or greater fatty acids when compared to a control cell lacking the heterologous nucleic acid molecule.

Claim 34 (previously presented) The cell according to claim 32, wherein the cell produces an increase in proportion of erucic acid when compared to a control cell lacking the heterologous nucleic acid molecule.

Claim 35 (previously presented) A seed comprising a plurality of cells as defined in claim 32.

Claim 36 (previously presented) A plant comprising a plurality of cells as defined in claim 31.

Claim 37 (previously presented) The plant according to claim 36, wherein said plant is a dicotyledon.

Claim 38 (previously presented) The plant according to claim 36, wherein said plant is a member of *Brassicaceae*, *Limanthaceae*, *Tropaeolaceae* or *Simmondsia* family.

Claim 39 (previously presented) The plant according to claim 36, wherein said plant is a member of genus *Brassica*.

Claim 40 (previously presented) The plant according to claim 36, wherein said plant is flax.

Claim 41 (currently amended) A method of increasing C<sub>20</sub> or greater fatty acid proportion in a plant-derived oil comprising cultivating a plant as defined in claim 35 <u>36</u>, and then extracting the plant-derived oil therefrom, the oil having increased C<sub>20</sub> or greater fatty

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acid proportion when compared to a control plant lacking heterologous nucleic acid molecule.

Claim 42 (previously presented) The method according to claim 41, wherein the C<sub>20</sub> or greater fatty acid comprises erucic acid and erucic acid proportion is increased in the oil.

Claim 43 (previously presented) The method according to claim 42, wherein the plant is flax or a member of genus *Brassica*.